

## APPLICATIONS OF A DIFFERENTIAL LATCH

### ABSTRACT OF THE DISCLOSURE

5           A differential latch includes a sample transistor section, a hold transistor section, a  
1<sup>st</sup> gating circuit and a 2<sup>nd</sup> gating circuit. The sample transistor section is operably  
coupled to sample, when coupled to a supply voltage (e.g.,  $V_{DD}$  and  $V_{SS}$ ) a differential  
input signal. The hold transistor section is operably coupled to latch, when coupled to the  
supply voltage, the sampled differential input to produce a latched differential signal.  
10   The 1<sup>st</sup> gating circuit is operable to couple the sampled transistor section to the supply  
voltage in accordance with a 1<sup>st</sup> clocking logic operation and a 2<sup>nd</sup> clocking logic  
operation. The 2<sup>nd</sup> gating circuit is operable to couple the hold transistor section to the  
supply voltage in accordance with a 3<sup>rd</sup> clocking logic operation and a 4<sup>th</sup> clocking logic  
operation.

15